

**REMARKS**

Claims 1-15 and 17-20 are pending in this application. By this Amendment, claims 2, 5, 7, 10, 11, 17 and 18 are amended, claim 16 is canceled and the specification is amended to correct an informality. No new matter is added by this Amendment. Support for the amendment to claim 2 is found in original claim 1, support for the amendment to claim 10 is found in original claim 16, and support for the amendments to claims 5, 7 and 11 is found at, for example, page 33 of the specification. Claims 17 and 18 are amended for clarity.

**I. Allowable Subject Matter**

Applicants thank the Examiner for the indication that claims 6 and 12 contain allowable subject matter.

**II. Claim Objections**

Claims 3 and 7 are objected on the grounds that it is not clear what  $p$  is; and claims 17 and 18 are objected to on the grounds that it is not clear what density of the dot fluctuated up and down at each dot means, the dot lacks antecedent bases, and it is not clear what density the dot is.

With respect to the objection to claims 3 and 7, page 33 of the specification identifies a nozzle pitch  $p$ . Claims 5, 7 and 11 are amended to further clarify this feature. Furthermore, claim 3 is not amended because there is no " $p$ " recited in claim 3.

With respect to the rejections of claim 17 and 18, these claims are amended for clarity. Antecedent basis for the dots is found in claim 10. Furthermore, support for the amendments to claims 17 and 18 is found at least at page 35 of the specification. Here it is stated that since the nozzles 140 of the ejector blocks 170A and 170B alternatively record the raster, the dot characteristics are changed in each raster on the recording medium and the density fluctuates up and down for each dot. Thus, the density of the dot fluctuates such that the density increases and decreases at each dot. Page 35 of the specification also references

Fig. 11 and states "that the density in which the small fluctuations have been eliminated is indicated by broken line L1. Comparing Fig. 11 with Fig. 10, it is confirmed that a fluctuating range FR shown in Fig. 11 is narrower than that of the conventional matrix-like nozzle arrangement shown in Fig. 10." Thus, the meaning of density of the dot is fluctuated up and down at each dot is clearly described in the specification and at least at, Figs. 10 and 11.

Withdrawal of the objections is requested.

### **III. Rejections Under 35 U.S.C. §102(a)**

Claim 1 is rejected under 35 U.S.C. §102(a) over U.S. Patent No. 6,923,521 (Bates); and claims 2, 4 and 19 are rejected under 35 U.S.C. §102(a) over U.S. Patent No. 6,595,614 (Morikawa). These rejections are respectfully traversed.

The Office Action asserts that Bates discloses at Fig. 11, large drops represented by large circles that are disposed in a random fashion. Applicants respectfully disagree.

Contrary to the assertions made in the Office Action, Bates fails to disclose that the large circles are disposed in a random fashion. In fact, the figures and specification of Bates require specific dimensions between each of the dots. However, even if Bates discloses large circles that are disposed in a random fashion, this is not a disclosure of sizes of dot diameters that are changed at random, as recited in claim 1. Bates discloses the use of a specific pattern for ejecting ink from nozzles. For example, as shown in Fig. 7 of Bates, there is a repeating vertical pattern of two large dots, two small dots, two large dots, two small dots, etc. See col. 8, lines 17-20 of Bates. This is not a disclosure of dot diameters that are changed at random. With reference to Fig. 11, Bates discloses that some pixel locations can receive both a large dot and a small dot, some pixel locations can receive only a large dot, and other pixel locations can receive only a small dot. See col. 9, lines 33-41 of Bates. Here, Bates is

disclosing only two sized dots, a large dot and a small dot, and not that the sizes of the dot diameters are changed at random.

Claim 2 is amended to recite that sizes of dot diameters of droplets from one of a plurality of ejectors is changed at random. As discussed above, Bates fails to disclose this feature. Morikawa also fails to disclose this feature.

For the foregoing reasons, claims 1 and 2, as well as claims 4 and 19 depending from claim 2, are not anticipated by Bates and Morikawa. Withdrawal of the rejections is respectfully requested.

#### **IV. Rejections Under 35 U.S.C. §103(a)**

Claim 3 is rejected under 35 U.S.C. §103(a) over Morikawa in view of U.S. Patent No. 6,742,866 (Anderson); claims 5, 7 and 9 are rejected under 35 U.S.C. §103(a) over Morikawa; claims 10, 11, 13, 15, 18 and 20 are rejected under 35 U.S.C. §103(a) over Morikawa in view of Anderson; claims 16 and 17 are rejected under 35 U.S.C. §103(a) over Morikawa in view of Anderson as applied to claim 10, and further in view of Bates; and, claim 18 is rejected under 35 U.S.C. §103(a) over Morikawa in view of Anderson as applied to claims 10 and 11, and further in view of Bates. These rejections are respectfully traversed.

Claim 10 is amended to incorporate the features of claim 16. As discussed above, Bates, as well as Morikawa, fail to disclose, teach or suggest that when dots of the droplets ejected on a recording medium are viewed in a main scanning-orthogonal direction, the sizes of dot diameters are changed at random, as recited in claim 10. Anderson fails to cure this deficiency of both Bates and Morikawa.

For the foregoing reasons, claim 10 is not rendered obvious by any combination of Morikawa, Anderson and Bates.

Claims 3-8 and 19 depend from claim 2, and claims 11-15, 17, 18 and 20 depend from claim 10. These claims are allowable for the same reasons set forth above with respect to claims 2 and 10, as well as for the additional features they recite.

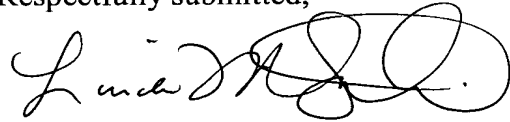
Withdrawal of the rejections is thus respectfully requested.

**V. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Date: February 15, 2006

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